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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,142	06/06/2005	Haidong Sun	E40.12-0001	1979
27367 7590 09/11/2007 WESTMAN CHAMPLIN & KELLY, P.A. SUITE 1400 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3319			EXAMINER MIZRAHI, DIANE D	
			ART UNIT 2165	PAPER NUMBER
			MAIL DATE 09/11/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/509,142

**Applicant(s)**

SUN ET AL.

**Examiner**

Diane Mizrahi

**Art Unit**

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3-5-07 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
DIANE MIZRAHI  
PRIMARY EXAMINER

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date 9-5-07
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

*In response to Applicant's amendment and remarks dated 06/14/2007, Applicant's remarks are considered moot.*

Claims 1-2 are pending.

#### **Response to Arguments**

Applicant's arguments filed 6-14-07 have been fully considered but they are not persuasive.

Examiner acknowledges the preliminary amendment of 9/27/04, which amended the specification.

In a telephone interview on September 5, 2007, with Applicant's representative, Judson K. Champlin, it was determined that claims 1-2 are non-statutory.

Therefore the 35 USC 101 rejection is maintained for claims 1-2. Applicant is directed to see the new and final office action below:

#### **Claim Objections**

Claim 1-2 are objected to because of the following informalities: There appears some typographical errors such as "stoke\*4" "4", for example. The entire claim 1 should be check for such errors. Appropriate correction is required. Claim Rejections - 35 USC ,~ 112 The following is a quotation of the second paragraph of 35 U.S.C. 112: The specification shall conclude with

one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claim Rejections - 35 USC § 112**

Claims 1-2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Examiner is unclear as to what means by "its" (line 1 for example).

Claims 1-2 should be checked for the claimed, "its" and "its" should be defined. Regarding the claimed, "and so on" (page 25, line 23) is not defined or understood by the Examiner of Record. Further clarification is required. Regarding Claim 1, Examiner believes claim 1 is not properly written according the USPTO standards. Examiner believes that Applicant should show "the breadth of the claims in the application" and that the claims are given the broadest reasonable interpretation consistent with the specification. See *In re Morris*, 127 F.3d 1048, 44 USPQ2d 1023 (Fed. Cir. 1997). See MPEP § 2111 - § 2116.01 for case law pertinent to claim analysis. 904.01(a). The subject matter of a properly construed claim is defined by the terms that limit its scope. It is this subject matter that must be examined. As a general matter, the grammar and intended meaning of terms used in a claim will dictate whether the language limits the claim scope. Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. This list of examples is not intended to be exhaustive. >See also MPEP § 2111.04. The form of claim required in 37 CFR 1.75(e) is particularly adapted for the description of improvement-type inventions. It is to be considered a combination claim. The

preamble of this form of claim is considered to positively and clearly include all the elements or steps recited therein as a part of the claimed combination. "[A] claim preamble has the import that the claim as a whole suggests for it." *Bell Communications Research, Inc. v. Vitalink Communications Corp.*, 55 F.3d 615,620, 34 USPQ2d 1816, 1820 (Fed. Cir. 1995). "If the claim preamble, when read in the context of the entire claim, recites limitations of the claim, or, if the claim preamble is necessary to give life, meaning, and vitality' to the claim, then the claim preamble should be construed as if in the balance of the claim." *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165-66 (Fed. Cir. 1999). See also *Jansen v. Rexall Sundown, Inc.*, 342 F.3d 1329, 1333, 68 USPQ2d 1154, 1158 (Fed. Cir. 2003). Applicant should review the guidelines on writing Claim 1.

Also, Regarding Claim 1, (line 1) What is an "embedded ZGX outline"? Is this a method, apparatus or computer-readable storage medium claim? Further clarification is required.

**Claim Rejections - 35 USC 101**

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title. Claim 1 is rejected under 35 U.S.C. 101 because the claims are directed to a non- statutory subject matter, specifically, the claims are not directed towards the final result that is "useful, tangible and concrete.

Claims 1-2 are rejected under 35 U.S.C. 101 because the claims are directed to a non- statutory subject matter, specifically, the claims are not directed towards the final result that is "useful, tangible and concrete.

See State Street, 149 F.3d at 1373-74 USPQ2d at 1601-02 and Alappat, 33 F.3d at 1544, 31 USPQ2d at 1557). The decisions state to be eligible for patent protection, the claimed invention as a whole must accomplish a practical application. A claim limited to a machine or manufacture, which has a practical application, is statutory. Alappat, 33 F.3d at 1544, 31 USPQ2d at 1557). That is, it must produce a “useful, concrete and tangible result”. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of “real world” value as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96 (1966); In re Fisher, 421 F.3d 1365, 76 USPQ 2d 1255 (Fed. Cir. 2005); In re Ziegler, 992 F.2d 1197, 1200-03, 26 USPQ 2d 1600,

Regarding Claims 1-2, these claims do not produce a concrete result. Examiner recommends that to satisfy the 101 rejection, that the process must have a result that can be substantially repeatable or must substantially produce the same result again. In re Swartz, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000).

Examiner asserts that data structures not claimed as embodied in computer readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. (See Warmerdam, 33 F.3d at 1361, 31 USPQ 2d at 1760. Data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permits the data structure’s functionality to be realized. Yet, Examiner recommends that the claimed computer-readable storage medium encoded with a data structure defines structural and functional interrelationships

between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized and thus statutory.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

#### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diane D. Mizrahi whose telephone number is 571-272-4079. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272-4146. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 305-3900 for After Final communication.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

A handwritten signature in black ink, consisting of several overlapping loops and a horizontal line at the bottom, positioned above the printed name.

Diane Mizrahi  
*Diane.Mizrahi@USPTO.gov*  
Primary Patent Examiner  
Technology Center 2100

Sept 5, 2007